



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE 37243-0435

ROBERT J. MARTINEAU, JR.
COMMISSIONER

BILL HASLAM
GOVERNOR

August 31, 2015

Via First Class and Electronic Mail to troy.morris.1@us.af.mil

AEDC/TSDCI

c/o Mr. Troy Morris

100 Kindel Drive Suite B-322
Arnold AFB, TN 37389-2322

Dear Troy Morris:

The Tennessee Department of Environment and Conservation (TDEC) appreciates the opportunity to provide comments on the Department of Air Force *Draft Programmatic Environmental Assessment (PEA) and Finding of No Significant Impact (FONSI) for the Proposed Implementation of the General Plan (GP) at Arnold Air Force Base (AFB)*. The applicant, the Arnold Engineering Development Complex (AEDC), proposes the implementation of thirteen (13) demolition projects and nineteen (19) development projects identified in the GP. These projects, all of which are sited within the Arnold AFB and the majority of which are sited in the existing industrial complex, are intended to improve AEDC test capabilities, bolster military personnel morale and skills, and reduce the physical footprint of AEDC by demolishing obsolete test cells and associated facilities at Arnold AFB.

Actions considered in detail within the Draft PEA include:

- No Action Alternative – AEDC would not implement the proposed projects identified in the Proposed Action and the existing space deficiencies, inadequacies, and redundancies would persist. None of the potential environmental effects associated with the project would occur.
- Applicant Proposed Action – AEDC would demolish thirteen (13) unneeded test facilities and associated test equipment in the Space and Missile, Aeropropulsion, and Flight System functional Area Development Plans (ADP). The aggregate square footage of building space to be demolished would be approximately 27,976 square feet. AEDC would also complete nineteen (19) construction or addition/alternation projects.
- Alternative Siting Location for the Proposed Fitness Center – AEDC would construct the proposed fitness center by the physical fitness trail where Building 1100 was demolished instead of at the location in the Proposed Action. This site is not located in close proximity to non-AEDC personnel and it could require additional expense to evaluate and stabilize the foundation; however, this site would be suitable for the proposed fitness center.
- Alternative Siting Location for the Proposed Office of Special Investigations (OSI) Building West of the Fire, Police, & Communications (FP&C) Building – AEDC would construct the proposed OSI building west of the FP&C building instead of at the location in the Proposed Action. This site would be suitable for the proposed OSI building, but would require some additional road/curb modifications.
- Alternative Siting Location for the Proposed OSI Building East of the FP&C Building – AEDC would construct the proposed OSI building east of the FP&C building instead of at the location in

the Proposed Action. This site would be suitable for the proposed OSI building, but would require some additional road/curb modifications.

- Alternative Incorporating Phased Renovation of the Base Civil Engineering (BCE) Maintenance Facility – AEDC would improve the existing BCE Facility in three phases instead of constructing a new BCE facility as described in the Proposed Action. Renovation phases would include: Phase 1, Second Floor; Phase 2, First Floor; and Phase 3, shops.

TDEC's **Division of Underground Storage Tanks (UST)** has reviewed the Draft PEA. UST advises that if the Petroleum Operations Fuels Laboratory Facility listed on page 1-11 will have new underground storage tanks installed and/or if any part of this project will disturb or modify the underground storage tanks and/or piping associated with tanks, AEDC will need to notify UST and file appropriate paperwork.

TDEC's **Tennessee Geological Survey (TGS)** has reviewed the Draft PEA and has no specific comments regarding the proposed action or its alternatives.

TDEC's **Division of Solid Waste Management (SWM)** has reviewed the Draft PEA. Solid Waste Management Units (SWMUs) have been identified previously at the facility and are currently being addressed by the facility. SWM advises that, if in the course of work at the site, additional disposal sites not previously identified are found, the facility will need to address those sites. Based on the review of records for old, closed solid waste landfills, no additional sites were identified in SWM's records showing disposal at the facility. Given that the facility has been in operation since 1941, SWM recommends that AEDC review any existing archival records to identify additional sites where on-site disposal may have occurred.¹ SWM advises that any wastes which may be unearthed during the project would be subject to a hazardous waste determination, and must be managed appropriately.

TDEC's **Division of Water Resources (DWR)** has reviewed the Draft PEA and provides the following comments:

- DWR advises that a full review of required permits be performed prior to the start of each proposed project.
- While the Arnold AFB proposed construction and demolition activities would not be located within a floodplain, DWR advises that any potential runoff from construction and demolition project be monitored, controlled, and properly permitted under the National Pollutant Discharge Elimination System (NPDES) and Stormwater rules. Additionally, DWR advises that any stream crossings, alterations, or wetland changes as result of construction/demolition should be properly permitted under the Aquatic Resource Alteration permit system.
- DWR comments that the proposed increased water withdrawals from the Woods Reservoir would likely require AEDC to obtain a withdrawal permit and recommends that AEDC address this permit requirement prior to the start of the proposed project.
- It is DWR's understanding that much of the Arnold AFB is on drip disposal for its wastewater and notes that there may be septic tanks and field lines/drip disposal fields associated with some of the buildings being demolished. DWR advises that the Final PEA and all subsequent tiered documents address proper abandonment of these structures should they be encountered.
- DWR comments that automotive wastes are not be allowed to enter floor drains that are connected to field lines or drip fields, both of which are considered Class V (5) wells by both the U.S. Environmental Protection Agency (EPA) and TDEC. DWR advises that the potential wastes from the proposed automotive maintenance shop be considered and handled properly.

¹ Tennessee's SWM program dates back to 1972, so there could conceivably be disposal in the proposed location that predates the program and of which SWM is unaware.

TDEC's **Division of Natural Areas (DNA)** has reviewed the Draft PEA and provides the following comments:

- Based on the information provided about this project and the habitat within the project area (degraded), DNA does not anticipate any impacts to rare, threatened, or endangered species from the proposed projects. However, should any listed species be extant at the site, DNA advises that project plans provide for the protection of these species.
- DNA recommends that AEDC coordinate this project with the Tennessee Wildlife Resources Agency to ensure that legal requirements for protection of state listed rare animals are addressed. Additionally, DNA advises that AEDC contact the U.S. Fish and Wildlife Service Field Office, Cookeville, Tennessee for comments regarding federally listed species.
- For stabilization of disturbed areas, the Tennessee Natural Heritage Program advocates the use of native trees, shrubs, and warm season grasses, where practicable. Care should be taken to prevent re-vegetation of disturbed areas with plants listed by the Tennessee Exotic Pest Plant Council as harmful exotic plants.
- DNA advises that AEDC keep in mind that not all of Tennessee has been surveyed and that a lack of records for any particular area should not be construed to mean that rare species necessarily are absent.

TDEC's **Division of Archeology (DOA)** has reviewed the Draft PEA has no specific comments regarding the proposed action or its alternatives.²

TDEC's **Division of Air Pollution Control (APC)** has reviewed the Draft PEA. The GP addresses APC's concerns with regard to potential air environmental impacts arising out of the Proposed Action and its alternatives. Specific comments provided by APC include:

- Arnold AFB will need to continue to maintain a Title V permit issued by the APC for onsite permitted sources³ and will need to continue to operate these sources over time. The proposed new construction and renovation may result in only minor increases in permissible emissions. APC advises that where permitted facility emissions are likely to increase, permit modifications or construction permits may be needed and/or required prior to the actual construction and renovation.
- The facility location and areas undergoing proposed demolition and construction are distant from urbanized areas and other small cities or towns. APC recognizes that this distance serves as a buffer to any potential fugitive dust emissions arising from the onsite demolition or construction activities reaching populated areas (other than those on site).
- APC notes that the area in which Arnold AFB is located (Coffee and Franklin counties) is currently classified as attaining all of the criteria air pollutants.
- Air quality impacts are discussed and reported to be mainly associated with construction and demolition related fugitive dust. APC advises that additional contributions can be expected from the construction equipment emissions while in use on site and recommends that best practices for managing emissions from construction equipment be addressed within the Final PEA.

² DOA also spoke with archaeologist Shawn Chapman with the Environmental Management Division at Arnold AFB about the Draft PEA in preparing their comments.

³ Arnold AFB is currently a Title V major source permit holder.

- APC comments that additional potential emissions could be generated as a result of the asbestos removal activity prior to on-site demolition and recommends that best practices for managing asbestos emissions be addressed within the Final PEA.⁴
- Lead paint is found on a number of structures and buildings on site and is abated onsite following the Lead and Heavy Metal Management Program guidance for Arnold AFB. APC recommends that AEDC follow all applicable regulations and practices to minimize dust emissions during lead paint renovation projects and address this topic in the Final PEA.
- APC advises that additional potential air quality impacts could be generated from the open burning disposal of any vegetative debris or tree debris that may result from land clearing activities and recommends that best practices for managing the open burning disposal of debris be addressed within the Final PEA.
- APC notes that Arnold AFB has 28 identified sites which may be locations containing hazardous wastes. APC recommends that these areas be avoided during construction activities and assessed prior to demolition activities to minimize potential air related emissions of hazardous wastes.
- APC comments that statements⁵ pertaining to National Ambient Air Quality Standards (NAAQS) averaging times, levels, and forms for attainment/nonattainment and redesignation on page 3-4 are incorrect and advises that AEDC reference current EPA NAAQS information for the correct averaging times, levels, forms, and redesignation for each pollutant.⁶

TDEC appreciates the opportunity to comment on the Draft PEA. Please note that these comments are not indicative of approval or disapproval of the proposed action or its alternatives, nor should they be interpreted as an indication of all necessary permits that may be required from TDEC should action be taken. Please contact me should you have any questions regarding these comments.

Sincerely,



Michelle Walker Owenby
Assistant Commissioner of Policy and Planning
Phone: (615) 532-9668

cc: Michelle Pruett, TDEC, UST
Ron Zurawski, TDEC, TGS
Lisa Hughey, TDEC, SWM
Jim Sutherland, TDEC, DWR
Stephanie Williams, TDEC, DNA
Mark Norton, TDEC, DOA
Lacey Hardin, TDEC, APC

⁴ Asbestos containing material is removed prior to any onsite renovation and demolition activities. Arnold AFB, which has an active Facility Asbestos Management program that includes a management plan and operating plan, has surveyed and found 205 buildings or structures with asbestos.

⁵ "In order to reach *attainment*, NAAQS may not be exceeded more than once per year. A *nonattainment* area can reach *attainment* when NAAQS have been met for a period of 10 consecutive years. During this time period, the area is in *transitional attainment*, also termed *maintenance*."

⁶ EPA NAAQS table available at <http://www.epa.gov/air/criteria.html>.